GLOSSARY

Alligatoring Intersecting cracks and ridges in weathered coatings that give an appearance of

an alligator hide.

Anode The consumable component (electrode) of cathodic protection systems and

corrosion cells.

Apron That portion of a wharf or pier carried on piles beyond solid fill.

As-built drawings Drawings that show all deviations from the original design and changes made

during construction.

Ashlar Sawed or dressed square stones used in facing masonry walls.

Bench mark A mark on a fixed and enduring object indicating a particular elevation. It is

used as a reference in topographic surveys, tidal observations, and construction.

Bent Framework crosswise to the length of a structure (e.g., trestle, bridge, or pier)

which it supports; usually designed to support stringers.

Berth The water area at the edge of a wharf or pier reserved for a vessel.

Bitt A single or double-posted steel fitting on a deck of a ship or pier to which

mooring lines are secured (see Figure 7-6).

Bollard A single or double-posted steel fitting on a pier or wharf around which mooring

lines from vessels are tied (see Figure 7-6).

Breakwater

A substantial structure, located at the outer limits of a harbor or anchorage, to protect the inner waters against the effects of heavy seas (see Figure 1-10).

Breast board

A temporary barrier or retaining board used to prevent the face of an excavation caving in.

Brow

A portable walk or bridge between ship and pier, or landing platform for use of personnel while the ship is berthed. It is usually equipped with handrails and has rollers on the shore end.

Bulkhead

A retaining wall to prevent sliding of earth or fill into water.

Bullrail

A guard, usually wooden, located along the outer edge of a wharf or pier to prevent accidental loss of equipment into the water.

Buoy

A float moored to the bottom to mark the position of a shoal, channel, or anchorage limit, or a floating component of a ship mooring.

Caisson

(1) A supporting foundation (dam) formed by pouring concrete, driving sheet lock piling, or forming other material into a hollow box or cylinder; allows maintenance and repair work to be done below water level. (2) A controlled submergence floating hull used as a watertight entrance closure for a graving dock.

Camel

A floating device acting as a fender and used to separate a moored vessel from a pier, wharf, quay, or other vessels.

Cap

(1) A horizontal timber secured to the top of a row of piles. (2) A fitted or threaded piece to protect the top of a pile from damage while being driven.

Cathodic protection

An electrical method of preventing metal corrosion in a conducting medium by placing a charge on the item through a transformer or a sacrificial anode.

Chock

(1) A wedge or block, commonly wooden, fitted between piling or other structures to steady them. (2) A metal casting with two horn-shaped arms curving inward between which mooring lines may pass; used for passage, guiding, or steadying of mooring or towing lines. (See Figure 7-6).

Cleat A metal fitting on the deck of a pier or ship usually with two projecting horns

around which a rope may be made fast (as by belaying it) (see Figure 7-6).

Cobblestone A naturally rounded stone.

Cofferdam A temporary watertight enclosure from which water is pumped to expose

normally immersed areas.

Cold iron Capability or service supplied to a docked ship so that necessary utilities (e.g.,

steam, water, electricity, sewage removal, telephones) are provided from shore

rather than from the power plant on the ship.

Concrete armor unit See dolos, tetrapod, and tribar.

Cradle A platform with keel and bilge blocks for holding ships.

Curb See bullrail.

Deadman A block or other heavy item, usually of concrete, buried in the ground to which is

attached a steel rod or cable for anchoring objects.

Deck The working surface of a wharf, pier, or vessel.

Dock The water area adjacent to a wharf or pier to which a ship can be secured.

Dolos A concrete armor unit used for riprap (see Figure 5-1).

Dolphin A structure usually consisting of a cluster of timber piles. It is placed at the

outward end of piers and wharves, or along shore, to guide vessels into their moorings, to fend vessels away from structures, shoals, or the shore, or to

support navigation aids.

Dolomite Limestone or marble rich in magnesium carbonate.

Drydock A facility for exposing the normally underwater portion of a ship for construction,

inspection, repair, or hull maintenance.

Elastomer An elastic rubber-like substance (such as a synthetic rubber or a plastic having some of the physical properties of natural rubber).

Electrolyte A nonmetallic medium capable of conducting electricity by the movement of ions

rather than electrons.

Electroosmosis The movement of a conducting liquid (such as water in clay) through a porous

diaphragm under the action of an electromotive force applied to electrodes on

opposite sides of the diaphragm.

Estuary A water passage where the tide meets a river current, especially an arm of the

sea at the lower end of a river.

Fender A device, usually of wood, rubber, or rope to prevent damage to a vessel or

shore facility by impact or abrasion.

Filter blanket A layer or progressively graded series of soil layers, or plastic cloth filter woven

of synthetic fibers, separating material of different grain size. The separation prevents the fine soil from entering into the open spaces of the coarser one.

Fire curtain wall A transverse wall under a pier which extends from the underside

(fire stop) of the decking to low water to contain a fire. (Each side of wood or metal fire curtain wall is protected by automatic sprinklers or deck openings for use of

revolving water nozzles.)

Fish plate A steel plate that laps a joint (see Figure 7-7) or an area of a piling reduced by

corrosion. It is secured to the sides so as to connect the members end to end or

to strengthen them.

Float A floating platform used for disembarking from a boat or working around

waterfront structures.

Floating drydock A ship or U-shaped structure in cross section that can be submerged by flooding

to permit a vessel to enter and then be dewatered to raise the vessel supported

on keel and bilge blocks out of the water.

Fouling An accumulation of deposits, especially marine biological growth.

Gad A pointed iron or steel bar for loosening rock.

Gravity wall A massive structure that obtains stability through its own weight.

Graving dock A fixed basin of usually either stone masonry, reinforced concrete, or sheet

piling cells near the water's edge. It can be closed off from the waterway by a

movable watertight barrier, usually a floating caisson (see Figure 1-4).

Groin A narrow structure projecting out, usually close to right angles, from the

shoreline (Figure 1-11). It is designed to influence offshore currents and wave

action in a manner that will minimize erosion of the shoreline.

Holiday A small hole in a coated surface arising from imperfect application.

Hyphal threads A filament outgrowth of fungus.

Incise To make cuts into wood parallel to the grain to permit the take up of greater

quantities of preservative.

Jetty A structure (such as a mound or wall) at or near the entrance to a harbor or river

constructed to confine the flow of water due to currents and tides, and to

maintain the entrance free of sandbars (Figure 1-9).

Leaching The process of extracting the soluble components from a material by

percolation.

Littoral drift Movement of sediment by underwater currents and tidal action, usually resulting

in formation of sandbars.

Marine railway An inclined groundway extending into the water, with a mobile cradle that moves

on the groundway tracks, for hauling a ship out of or into the water.

Marine borer Destructive organism in seawaters that attacks untreated or poorly treated wood;

especially active in warm waters.

Mill scale Oxide layer formed on iron and steel when heated for rolling, forging, or other

processing.

Mole A rubble-mound structure that extends outward from shore into the navigable

water of a harbor (Figure 1-8). Generally, the level top is appreciable in area

and contains paved roads, railroads, and crane trackage.

Mound An artificial embankment or ridge composed of sand, gravel, and cobbles and

constructed on the ocean floor by dumping the material from scows and barges.

Pier An open- or closed-type structure usually extending perpendicularly from the

shore into sheltered navigable water, designed for berthing, loading or unloading cargo, repair, fueling, and general servicing of vessels. It normally provides

berthing space on both sides for its entire length (see Figure 1-1).

Piezometer An instrument for measuring pressure or compressibility.

Pile (piling)

A long, slender timber, steel, or reinforced concrete structural element driven,

jetted, or otherwise embedded into the ground to support a vertical load, to resist

a lateral force, or to resist water or earth pressure.

Potable Suitable for drinking.

Preservative A material with the property of retarding deterioration.

Quarrystone A diamond or square cut stone.

Quay See wharf.

Quaywall A heavy structure fronting on navigable water, and parallel to the shore, behind

which earth fill is placed. Its function is to act as a bulkhead as well as to

provide for berthing of vessels or other service.

Radiography The process of making a picture upon a sensitive surface by a form of radiation

other than light. It is used for detecting flaws in welds and other metal

structures.

Relieving platform A platform built on piling or other support structures to carry fill to support

surface structure.

Rubble Rough and uncut stones, irregularly shaped and of various sizes ranging up to

1,000 cu ft each and up to 90 tons each.

Riprap Stones, boulders, or concrete armor units of miscellaneous size placed without

order on the surface of an earthen structure or embankment to act as protection

against erosion.

Seasoning check or crack A lengthwise separation of a wooden timber that extends across the rings of

annual growth and commonly results from stresses set up in the wood during

seasoning.

Seawall A massive gravity-type structure built along, and generally parallel to, the

shoreline; designed to protect the shore against erosion resulting from wave

action.

Sheepsfoot roller A roller with spikes inserted to compact, perforate, or scarify the rolled surface.

Shoreline The boundary area where water meets land.

Shotcrete or gunite is a concrete that is pneumatically placed in layers usually

from 1 to 2 inches. Water is mechanically added to the dry mixture at the nozzle, which shoots the freshly mixed concrete (really a mortar) at the surface

prepared for its reception.

Stringer A horizontal framing member used to support a floor or deck.

Syntactic foam A foam composed of hollow spheres in a resin matrix.

Tetrapod A nonreinforced concrete armor unit used for riprap (see Figure 5-1).

Traprock Fine-grained igneous rock.

Tremie A steel tube 12 inches or greater in diameter used for depositing concrete

underwater, having at its upper end a hopper for filling.

Tribar A reinforced concrete armor unit used for riprap (See Figure 5-1).

Tuck-point

To finish the joints between masonry units with a narrow ridge (bead) of mortar.

Pointing mortars usually shrink after placement and if finished flush with the

masonry units will result in a concave joint.

Turning basin An enlarged space at the end of a canal or narrow channel to permit vessels to

turn around.

Ultrasonic testing High frequency sound readings to determine voids in landfills, flaws in welds,

etc.

Vertical lift A platform which is lowered into the water to receive a small vessel and then

elevated out of the water by hoisting equipment (see Figure 1-6).

Wale A long, horizontal structural member of timber or steel used for bracing vertical

members. Also known as "waler" or "ranger."

Weep hole An opening in a retaining wall, canal lining foundation, or other structure to drain

away accumulated water.

Wharf An open-type marginal platform structure, usually parallel to the shoreline, that is used primarily for berthing of vessels. It is usually connected to the shore at

more than one point but may also have continuous access along the shore. It

ordinarily provides berthing along the outboard face (see Figure 1-2).